Chair Tony Doan Washington State Building Code Council 1500 Jefferson St SE Olympia, WA 98501

Dear Chairman Doan and Members of the State Building Code Council:

In addition to the well-known climate, economic and health risks associated with using methane gas to cook in and heat our homes and offices, gas is highly explosive and a frequent cause of leaks, fires and explosions. It is particularly dangerous in an earthquake-prone region like ours.

- Between 2010 and 2020, a gas accident causing major damage, injury, or deaths occurred nearly once every two days<sup>1</sup>.
- On average, over 3 years (2016-2018), a gas pipeline incident has killed someone, sent someone to the hospital, and/or caused a fire and/or explosion once every 4 days nationwide<sup>2</sup>.
- Between 2010 and 2021, there were 2,595 reported instances of methane gas leaks, including many resulting in injury or death<sup>3</sup>.
- Gas is responsible for at least 20% of post-earthquake fire ignitions<sup>4</sup>.
- Gas transmission pipelines run a high risk of exploding during earthquakes, and are also a liability for recovery because gas lines can take 30 times longer to restore<sup>5</sup> than the electric system after natural disasters.
- And a recent study from the United Kingdom found that if hydrogen were used in homes to replace gas, the annual predicted number of explosions would more than *quadruple*<sup>6</sup>.

## Recent local examples include:

- Roslyn home explosion results in fatality<sup>7</sup> (January 14, 2022)
- Second explosion in two weeks roils Roslyn residents<sup>8</sup> (January 21, 2022)
- Natural gas explosion levels buildings in Seattle neighborhood<sup>9</sup> (2016), sending nine firefighters to the hospital and causing \$3 million in damage.
- Motel 6 in Bremerton, Washington, Rocked by Gas Explosion; 2 Remain Missing<sup>10</sup> (2015), critically injuring a gas company worker
- Natural gas explosion destroys buildings in Wash. state<sup>11</sup> (North Bend, 2014)
- And just in Vancouver, WA in recent years:
  - o 100 residents evacuate after 'dangerously high levels of gas' found<sup>12</sup> June 30, 2022
  - 164th Avenue closed due to gas line break in east Vancouver<sup>13</sup> March 14, 2022
  - o Gas leak closes area around Cascade Park Plaza in east Vancouver<sup>14</sup> June 8, 2021
  - o Major gas leak at Vancouver Center, building evacuated<sup>15</sup> September 12, 2019
  - Five workers hurt after natural gas plant explosion in Washington state<sup>16</sup> (2014), emitting a mushroom cloud of black smoke and forcing the evacuation of 400 people from nearby homes and farms.

For our climate, our health, and our safety, it's imperative that we end the use of gas in our buildings, beginning by not connecting any more new buildings to the gas network. Therefore, I strongly urge the SBCC to adopt the WSEC-R proposal to require heat pumps, and increased ventilation for gas stoves.

## Sincerely,

Brian Emanuels 2255 82<sup>nd</sup> Ave SE

Mercer Island, WA 98040

<sup>&</sup>lt;sup>1</sup> https://climatenexus.shinyapps.io/GasExplorer/

<sup>&</sup>lt;sup>2</sup> https://www.phmsa.dot.gov/data-and-statistics/pipeline/distribution-transmission-gathering-lng-and-liquid-accident-and-incident-data

<sup>&</sup>lt;sup>3</sup> https://pirg.org/resources/methane-gas-leaks/

<sup>&</sup>lt;sup>4</sup> https://ssc.ca.gov/wp-content/uploads/sites/9/2020/08/cssc 2002-03 natural gas safety.pdf

<sup>&</sup>lt;sup>5</sup> https://pv-magazine-usa.com/2019/09/17/electrification-is-an-all-around-winner/

<sup>&</sup>lt;sup>6</sup> https://www.rechargenews.com/energy-transition/hydrogen-in-the-home-would-be-four-times-more-dangerous-than-natural-gas-government-report/2-1-1047218

<sup>&</sup>lt;sup>7</sup> https://www.dailyrecordnews.com/news/roslyn-home-explosion-results-in-fatality/article 7b2faae1-9fca-5c65-9d6f-fe2a898bb5db.html

<sup>&</sup>lt;sup>8</sup> https://www.dailyrecordnews.com/news/second-explosion-in-two-weeks-roils-roslyn-residents/article 18fcf3bf-d6d1-583a-bcce-1a824f3f267a.html

 $<sup>^{9}\,\</sup>underline{\text{https://komonews.com/news/local/flashback-friday-natural-gas-explosion-levels-buildings-in-seattle-neighborhood}}$ 

<sup>&</sup>lt;sup>10</sup> https://www.nbcnews.com/news/us-news/motel-6-bremerton-washington-rocked-gas-explosion-2-remain-missing-n412166

<sup>11</sup> https://www.cbsnews.com/news/natural-gas-explosion-destroys-buildings-in-wash-state/

<sup>12</sup> https://www.kptv.com/2022/07/01/vancouver-residents-evacuating-after-dangerously-high-levels-gas-found/

<sup>&</sup>lt;sup>13</sup> https://www.columbian.com/news/2022/mar/14/164th-avenue-closed-due-to-gas-line-break/

<sup>&</sup>lt;sup>14</sup> https://www.columbian.com/news/2021/jun/08/gas-leak-closes-area-around-cascade-park-plaza-in-east-vancouver/

<sup>15</sup> https://www.koin.com/news/major-gas-leak-at-vancouver-center-building-evacuated/

<sup>&</sup>lt;sup>16</sup> https://www.theguardian.com/world/2014/apr/01/five-injured-natural-gas-plant-explosion-washington